Application No.: 10/710,660

AMENDMENT

To the claims:

1. (currently amended) An active matrix organic light emitting diode

(AMOLED) driving control circuit for dynamically adjusting the white balance of an

AMOLED display panel, comprising:

a gate driving circuit for generating a horizontal scan signal to control a scan

line of the AMOLED display panel;

a source driving circuit for applying a video data to the AMOLED display panel

according to the horizontal scan signal;

a programmable voltage generator for generating a plurality of programmable

voltage sources that serves as power sources for driving red, green and blue pixels within

the AMOLED display panel; and

a timing control circuit coupled to the gate driving circuit, the source driving

circuit and the programmable voltage generator-for controlling the timing of the

submission of the video data between the gate driving circuit and the source driving

circuit and dynamically adjusting the voltage value of the programmable voltage sources

according to the usage status of the AMOLED display panel, comprising:

a source and gate timing data control circuit for controlling the timing of

the submission of the video data between the gate driving circuit and the source driving

circuit;

an interface processing circuit serving as a signal transmission interface;

<u>and</u>

Application No.: 10/710,660

a white balance adjusting circuit coupled to the source and gate timing

data control circuit and the interface processing circuit for adjusting parameters to set the

voltage value of the programmable voltage sources according to the display time and the

number of pixels having a displayed gray level higher than a fixed value of the AMOLED

display panel and submitting the parameters to the programmable voltage generator

through the interface processing circuit,

wherein the source and gate timing data control circuit, the interface processing

circuit and the white balance adjusting circuit are manufactured on a single chip or

integrated circuit (IC) to form the timing control circuit.

2. (canceled)

3. (currently amended) The AMOLED driving control circuit of claim [[2]] 1,

wherein the white balance adjusting circuit at least comprises:

a first comparator for comparing the video data with a preset data value and

generating a first compare signal;

a counter coupled to the first comparator for counting a count value based on

the first compare signal;

a second comparator coupled to the counter for comparing the count value with

a preset count value and generating a second compare signal;

an AND logic unit coupled to the second comparator for generating an

adjusting signal based on the second compare signal after the passage of a preset time

Application No.: 10/710,660

period; and

a parameter setting unit coupled to the AND logic unit for providing the

parameter for setting the voltage value of the programmable voltage sources according to

the adjusting signal and transmitting the parameter to the programmable voltage generator

through the interface processing circuit.

4. (original) The AMOLED driving control circuit of claim 3, wherein the

preset data value, the preset count value and the preset time period are stored inside a read

only memory unit.

5. (original) The AMOLED driving control circuit of claim 3, wherein the

preset data value, the preset count value and the preset time period are stored inside an

electrically erasable programmable read only memory unit.

6. (original) The AMOLED driving control circuit of claim 3, wherein the

preset data value, the preset count value and the preset time period are stored inside a flash

memory unit.

7. (currently amended) The AMOLED driving control circuit of claim [[2]] 1,

wherein interface processing circuit comprises a serial transmission interface.

8. (currently amended) A method of dynamically adjusting the white balance of

Application No.: 10/710,660

an active matrix organic light emitting diode (AMOLED) display panel using an

AMOLED driving control circuit, comprising:

providing a plurality of programmable voltage sources to serve as power

sources for driving red, green and blue pixels within the AMOLED display panel; and

adjusting the voltage value of the programmable voltage sources dynamically

according to the usage status display time and the number of pixels having a displayed

gray level higher than a fixed value of the AMOLED display panel.

9. (original) The adjusting method of claim 8, wherein the step of adjusting the

voltage value of the programmable voltage sources dynamically according to the usage

status of the AMOLED display panel comprises:

receiving a video data;

comparing the video data with a preset data value;

increasing the value inside a counter when the video data is not less than the

preset data value;

comparing the counter value with a preset count value; and

adjusting the voltage value of the programmable voltage sources after the

passage of a preset time period when the count value is not less than the preset count

value.